

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES O. MUIRHEAD
and GERALD E. HELD

Appeal No. 96-0750
Application 07/944,561¹

ON BRIEF

Before KRASS, JERRY SMITH and BARRETT, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed September 14, 1992.

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This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-7, 10-15 and 18-23. Claims 8 and 16 have been cancelled. The final rejection indicated that claims 9, 17, 24 and 25 were allowed. An amendment after the final rejection was filed on July 25, 1994 and was entered by the examiner. In response to the appeal brief, the examiner indicated that claims 11-15, 18, 19 and 23 were allowed [answer, page 1]. The examiner's answer changed the rejection of the claims by dropping one of the applied references. Appellants filed an amendment concurrently with a reply brief in response to the new ground of rejection in the answer. In response to this amendment and the reply brief, the examiner indicated that claims 3-7, 10 and 22 were allowed [supplemental answer, page 1]. Consequently, only claims 1, 2, 20 and 21 remain rejected in this application and form the basis of this appeal.

The claimed invention pertains to a method and apparatus for indicating the presence or absence of non-periodic RF pulses.

Representative claim 1 is reproduced as follows:

1. A pulse signal level detector for detection of non-

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periodic RF pulses, comprising:

RF detection means for detecting the RF pulse and providing an RF detector signal;

first means for receiving said RF detector signal and providing a second signal identical to said RF detector signal and delayed relative thereto; and

second means for comparing the amplitude of said delayed signal to the maximum amplitude of said RF detector signal and providing a comparison signal indicating the presence or absence of said RF pulse.

The examiner relies on the following reference:

Rhodes	4,803,701	Feb. 07, 1989
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Claims 1, 2, 20 and 21 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Rhodes taken alone.

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answers for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evi-

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dence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answers.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1, 2, 20 and 21. Accordingly, we reverse.

Appellants have indicated that for purposes of this appeal claims 1, 2, 20 and 21 will stand or fall together as a single group. Consistent with this indication appellants have made no separate arguments with respect to any of these claims on appeal. Accordingly, all the claims before us will stand or fall together. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Accordingly, we will

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only consider the rejection against claim 1 as representative of all the claims on appeal.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally

available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert.

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denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

As indicated by the cases just cited, the examiner has at least two responsibilities in setting forth a rejection under 35 U.S.C. § 103. First, the examiner must identify all the differences between the claimed invention and the teachings of the prior art. Second, the examiner must explain why the identified differences would have resulted from an obvious modification of the prior art. In our view, the examiner has not properly identified all the differences between claim 1 and the teachings of Rhodes so that the rejection lacks an explanation as to why at least one of the differences would have been obvious.

Appellants' initial argument is that the examiner has failed to establish a prima facie case of obviousness. We

note that the examiner asserts that Rhodes teaches the invention of claim 1 except for detecting pulses in an RF system. The examiner concludes that it would have been obvious to the artisan to apply the teachings of Rhodes to an RF pulse detector [answer, page 4]. Appellants argue that Rhodes does not disclose any of the elements of claim 1. More particularly, appellants argue not only that the Rhodes system will not work on RF pulses, but also that the comparator in Rhodes does not compare the delayed signal to a maximum value of the undelayed signal as recited in claim 1.

In our view, appellants have properly identified two differences between the invention of claim 1 and the teachings of Rhodes. The first difference is the claimed detection of RF pulses as opposed to Rhodes' digital pulses. Although the examiner has basically dismissed this difference as being obvious, the examiner has failed to support this position with any factual evidence on the record before us. The second difference is the claimed comparison of delayed signals against the maximum value of the undelayed signals. The examiner never addresses the obviousness of this limitation in

the rejection of claim 1 nor responds to any of appellants' arguments regarding this limitation.

The pulse signal in Rhodes has a very different form than the RF signal in the invention. The RF signal of the invention reaches a maximum value and stays there as shown in appellants' FIG. 3. The delay in appellants' invention is maintained long enough to ensure that the undelayed signal will have reached its maximum value for comparison. The signals in Rhodes are repetitive as shown in FIGS. 1 and 2. Rhodes is only interested in detecting the presence of a signal by computing the initial slope of the signal. According to appellants, the delay in Rhodes cannot be long enough to permit the undelayed signal to reach its maximum value before the subtraction takes place. The slope in Rhodes must be determined before the signal begins to decrease in value, that is, before the maximum value is reached. According to appellants, the system of Rhodes would not operate if the delay allowed the incoming signal to reach its maximum value and start decreasing again. We agree.

Every argument appellants make with respect to the differences in the delay and the maximum value of the

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undelayed signal between their invention and the teachings of Rhodes is logical, thoughtful and unrebutted. Since the examiner never addresses the limitation of claim 1 that the comparison must be

between the delayed signal and the maximum value of the undelayed signal, we have no prima facie case as to the obviousness of this particular limitation of the claimed invention.

In summary, the examiner's failure to address a particular feature of the claimed invention which has been persuasively asserted by appellants amounts to a failure to make a prima facie case of obviousness. Therefore, we do not sustain the rejection of claims 1, 2, 20 and 21 as unpatentable over the teachings of Rhodes. Accordingly, the decision of the examiner rejecting claims 1, 2, 20 and 21 is reversed.

REVERSED

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